

DPK6 Installation Instructions

Environmental Conditions

Temperature: - 10 to +55 °C

Air speed: 1 to 20 ms⁻¹

Configuration/Settings

In order to comply with EN54-27 only one of the following modes shall be configured:

- HPO - sensitivity high
- Fastlogic - HPO - sensitivity high

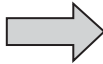
Mounting and Positioning

The DPK6 should be installed according to the drawing below (see Fig. 1). The DPK6 can be installed on any side of the duct.

We recommend that the DPK6 is mounted at an equal distance from heating, cooling, or humidity devices, similar to the sitting of the flow monitors.

A distance of 3 times the duct diameter should be left before a damper, filter or change of the duct direction, and 5 times the diameter after these devices.

The DPK6 smoke detector shall be installed pointing towards the airflow direction.



Airflow Direction

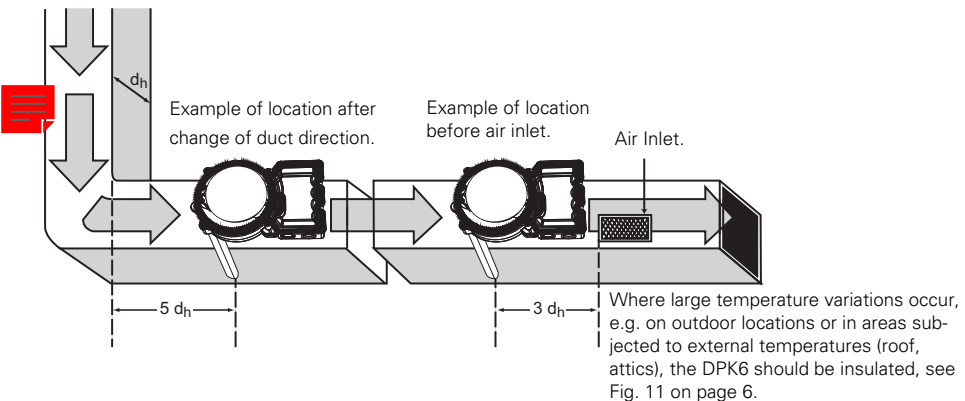
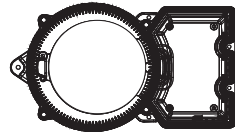


Fig. 1: Positioning (1)

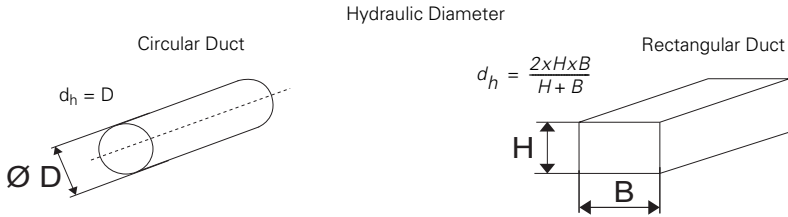


Fig. 2: Hydraulic Diameter

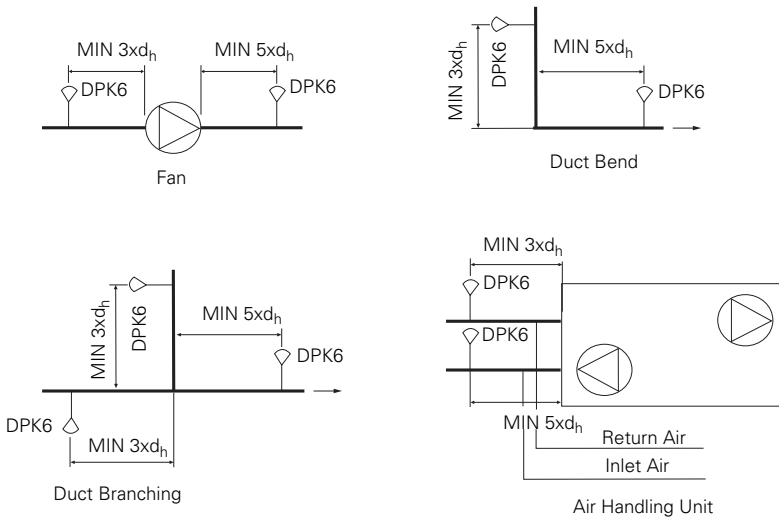


Fig. 3: Positioning (2)

Example of installation at the source of interference:

- Fan
- Damper
- Silencer
- Battery
- Air handling unit
- Duct bend
- Duct branching

■ Duct narrowing or expansion

- 1 Drill a hole in the duct:
Without DPK6 bracket, Ø 38 mm.
With DPK6 bracket, Ø 51 mm (see Fig. 12)
- 2 Measure the diameter of the duct.
- 3 Shorten the pipe, if necessary (see Fig. 4).
The pipe should penetrate approximately 90% of the width of the duct.

NOTE: See "Fitting of Pipes in Ducts with Different Diameters" on page 6.

4 Insert the end plug.

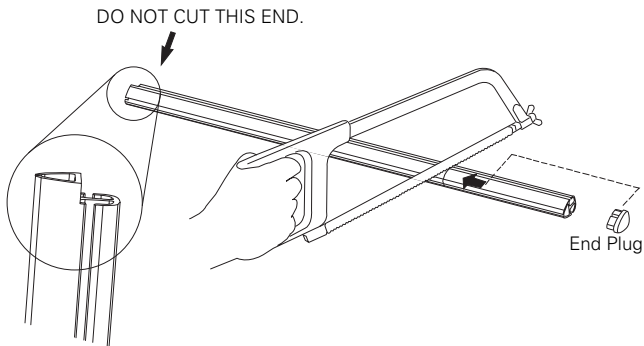


Fig. 4: Pipe Cutting Procedure

5 Insert the pipe into the bottom of the DPK6.

6 Secure the pipe with the locking screw.

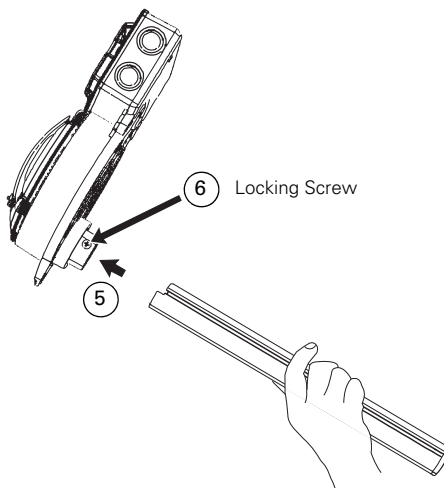


Fig. 5: Securing Pipe

Installation on the Duct

- 1 Mount the pipe and the detector on the duct.
- 2 Secure the bottom of the DPK6 with the three screws, positions marked.

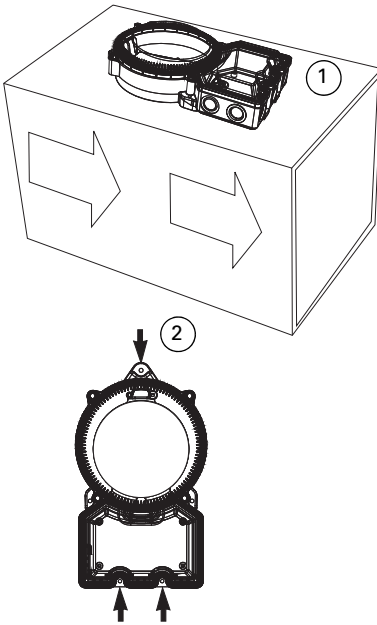


Fig. 6: Duct Installation

- 2 Use a cable gland (PG13.5 or M20). The DPK6 is factory prepared with one cable opening. In case more than one opening is needed, carefully remove the round plastic wall in the selected entry and insert a cable gland. If the factory prepared opening is not used, it must be properly sealed.
- 3 Connect the cables in accordance with the wiring diagram (see Fig. 8).
- 4 Insert detector 850PH, 830PH or FC460PH (to be ordered separately) into the detector base.
- 5 Fit the transparent cover back onto the housing and tighten it with the four screws.

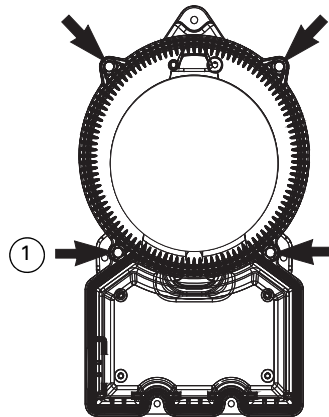


Fig. 7: Connect the Cables

Electrical Installation

- 1 Unscrew the four screws and remove the transparent cover from the housing.

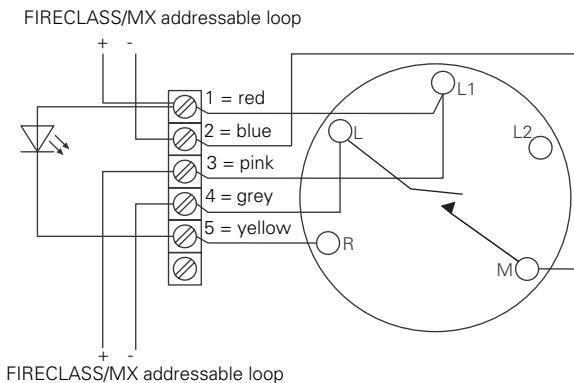


Fig. 8: 4B-C Base Wiring Diagram for use with 850PH

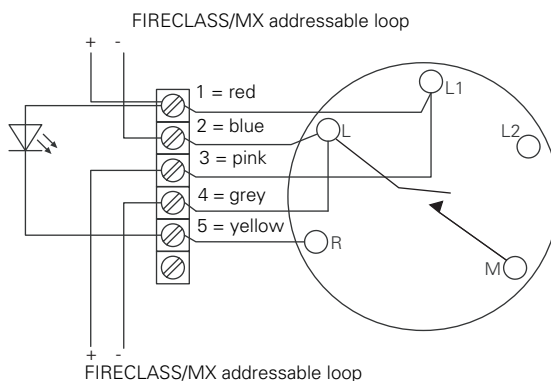


Fig. 9: 4B-C Base Wiring Diagram for use with 830PH or FC460PH detectors

Remove the blue wire from terminal "M" and connect it to terminal "L" (together with grey wire)

Fitting of Pipes in Ducts with Different Diameters

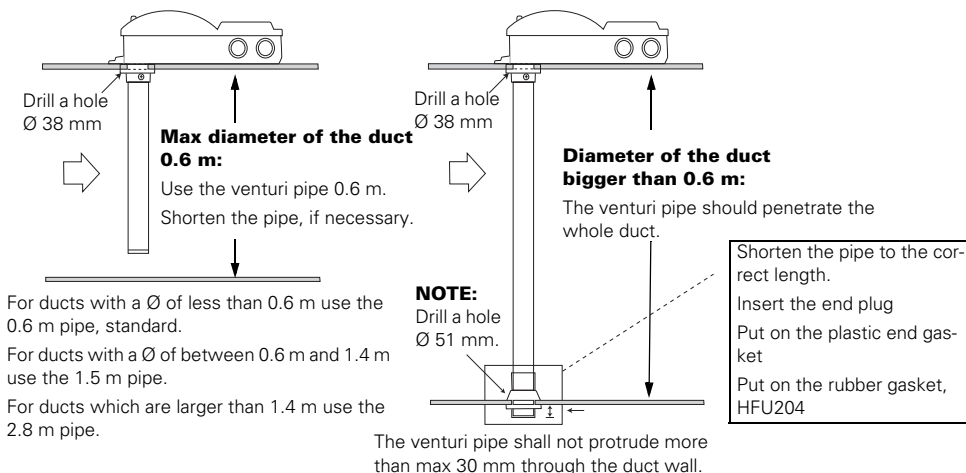


Fig. 10: Fitting Pipe in Duct

Mounting in places where possible condensation problems could arise

For example cold attics or outdoor.

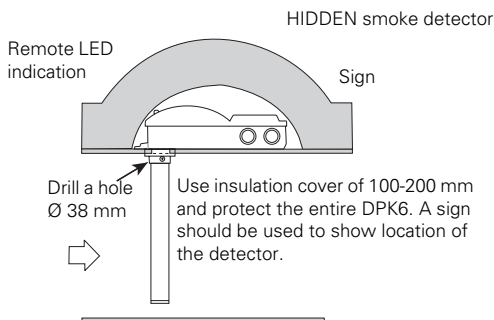


Fig. 11: Mounting Location

Bracket for Circular or Insulated Rectangular Ducts

Using the bracket, the diameter of the duct can be as small as 100 mm. The bracket is supplied with rubber gasket and sealing sleeve.

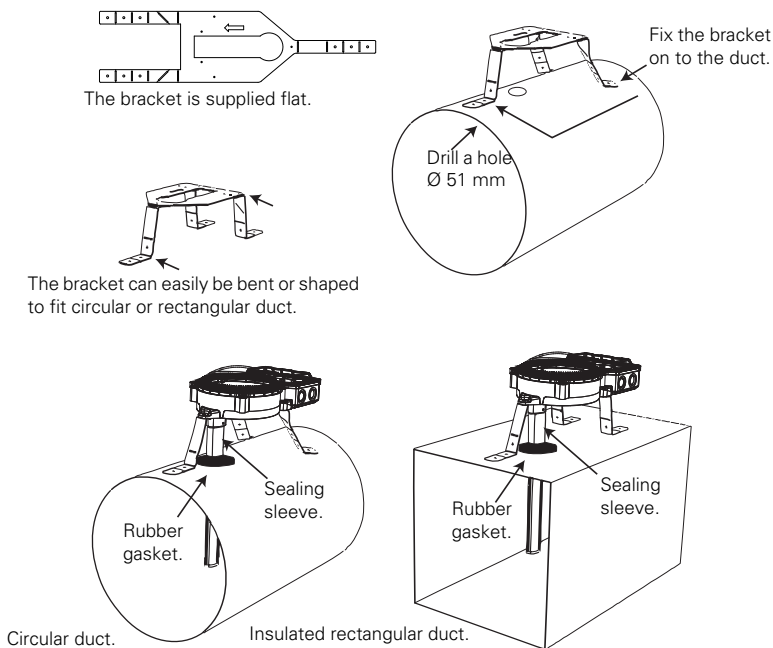


Fig. 12: Mounting Detector with Brackets

Final Checks

- Check that the DPK6 is correctly installed in accordance with the duct airflow.

- Check that the plastic plug of the test hole is properly installed.
- It is recommended that smoke from a smoke generator is introduced into the duct to check the detector's function.

Test of Detector

Check the detector with test aerosol (e.g. 517.001.256).

- 1 Move the "test hole plug" to the side and briefly release a spray of aerosol. When alarming the LED lights red on the detector.
- 2 Reassemble the "test hole plug".



CAUTION: Avoid Drilling Holes

Do not drill any holes in the cover for signs etc. Holes will cause air leakages and seriously disturb the function of the detector.

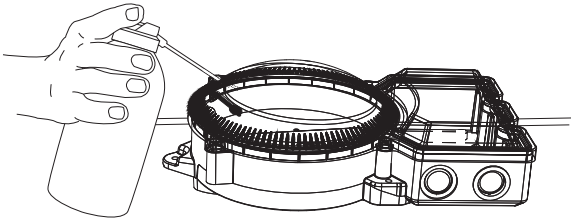


Fig. 13: Test Detector

Order Information



NOTICE: Product Disposal

According to WEEE (Waste of Electrical and Electronic Equipment) directive, you must at the end of life of the product dispose of it separately at an appropriate collection point and not place it with unsorted waste.

Order Number	Product Name
517.025.056	DPK6 Duct probe (w/o detector)
517.025.058	*DPK6-60 - Duct Probe Tube 60 cm
517.025.059	*DPK6-150 - Duct Probe Tube 150 cm
517.025.060	*DPK6-280 - Duct Probe Tube 280 cm
517.025.061	*DPK6-MB - Duct Probe Mounting bracket
516.850.051	*850PH Detector
516.830.051	*830PH Detector
516.460.501	*FC460PH Detector

Table 1: Order Information

Note: * Part to be ordered separately.